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Docket No. 124611/GEM-0052

REMARKS / ARGUMENTS

Status of Claims

Claims 1-4, 7-13 and 16-22 are pending in the application. Claims 1-4, 7-13 and 16-22 stand rejected.

Applicant has amended Claims 1, 10, and 19, canceled Claims 8 and 17 leaving Claims 1-4, 7, 9-13, 16, 18-22 for consideration upon entry of the present Amendment.

Applicant respectfully submits that the rejections under 35 U.S.C. §103(a), have been traversed, that no new matter has been entered, and that the application is in condition for allowance.

Rejections Under 35 U.S.C. §103(a)

Claims 1-4, 9-13 and 18 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kaufman et al. (U.S. Publication No. 2003/0016852, hereinafter Kaufman) in view of Vick et al. (U.S. Patent No. 4,115,864, hereinafter Vick), Arand et al. (U.S. Patent No. 5,628,326, hereinafter Arand) and Griffin et al. (U.S. Publication No. 2005/0137484, hereinafter Griffin).

Regarding Claims 1-4, 9-13 and 18 the Examiner acknowledges that Kaufman does not specifically disclose the steps of calculating duration of the cardiac cycle by averaging at least a plurality of said N-1 intervals, a mean method including discarding at least one of a longest and shortest interval of said N-1 intervals, and computing a mean of a remaining N-1 intervals indicative of the representative cardiac cycle and a median method and looks to Vick, Arand and Griffin to cure this deficiency.

Claims 8, 13, 17 and 19-22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kaufman in view of Vick, Arand, Griffin and further in view of Boyd (U.S. Patent No. 7,020,511, hereinafter Boyd) and further in view of Lutz (U.S. Patent No. 5,832,051, hereinafter Lutz).

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Regarding Claims 8, 13, 17 and 19-22, the Examiner acknowledges that the combination of Kaufman, does not show the claimed steps of selecting a middle interval, which is indicative of the representative cardiac cycle so as to associate with a computed tomography system scan and looks to Boyd and Lutz to cure this deficiency.

Applicant traverses these rejections for the following reasons.

Applicant respectfully submits that the obviousness rejection based on the References is improper as the References fail to teach or suggest each and every element of the instant invention in such a manner as to perform as the claimed invention performs. For an obviousness rejection to be proper, the Examiner must meet the burden of establishing a prima facie case of obviousness. *In re Fine*, 5 U.S.P.Q.2d 1596, 1598 (Fed. Cir. 1988). The Examiner must meet the burden of establishing that all elements of the invention are taught or suggested in the prior art. MPEP §2143.03.

Applicant respectfully submits that independent Claims 1 and 10 as amended are not obvious in light of Kaufman in view of Vick, Arand and Griffin. Independent Claims 1 and 10 includes, inter alia: "*a median method comprising arranging said N-1 intervals; and selecting a middle interval of said N-1 intervals, said middle interval indicative of the representative cardiac cycle so as to associate with a computed tomography imaging system scan.*" Applicant respectfully submits that neither Kaufman, Vick, Arand nor Griffin disclose, teach or suggest the claimed median method limitation. Accordingly, Applicant respectfully requests reconsideration and withdrawal of this objection.

Dependent Claims 2-4, 11-13 and 18 depend either directly or indirectly from independent Claims 1 and 10. In light of the amendment and clarifying remarks provided above regarding the allowability of independent Claims 1 and 10, Applicant respectfully submits that Claims 2-4, 11-13 and 18 are allowable for at least the reason of being dependent upon an allowable claim. Accordingly, Applicant respectfully requests reconsideration and withdrawal of this objection.

Claims 8, 13, 17 and 19-22 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Kaufman in view of Vick, Arand, Griffin and further in view of Boyd

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(U.S. Patent No. 7,020,511, hereinafter Boyd) and further in view of Lutz (U.S. Patent No. 5,832,051, hereinafter Lutz).

Regarding Claims 8, 13, 17 and 19-22, the Examiner acknowledges that the combination of Kaufman, does not show the claimed steps of selecting a middle interval, which is indicative of the representative cardiac cycle so as to associate with a computed tomography system scan and looks to Boyd and Lutz to cure this deficiency.

By this amendment, Applicant has amended independent Claims 1, 10 and 19 to include the limitation that the median method comprises "*arranging said N-1 intervals; and selecting a middle interval of said N-1 intervals, said middle interval indicative of the representative cardiac cycle so as to associate with a computed tomography imaging system scan*" that was previously claimed in dependent Claims 8 and 17. Applicant respectfully submits that a prima facie obviousness in light of Kaufman in view of Vick, Arand, Griffin and further in view of Boyd and further in view of Lutz has not been met since the Boyd reference is not prior art against the present Application.

Applicant respectfully refers the Examiners attention to the Amendment dated August 14, 2006, page 2 where Applicant provided a **Statement Concerning Common Ownership** concerning the present Applicant and the U.S. Patent to Boyd. Further, this Statement Concerning Common Ownership was reasserted in the Amendment dated May 9, 2007. However, in both the Final Office Action Paper No. 20061102 and the Office Action Paper No. 20070712, it appears that the Examiner has overlooked the aforementioned Statement, and has continued to apply Boyd, which for the reasons stated below, Applicant respectfully submits is 35 U.S.C. § 102(c) art for the purposes of rejection under 35 U.S.C. § 103(a), which Applicant respectfully submits, absent further explanation from the Examiner, is an error of law.

Under 35 U.S.C. § 103(c) where a cited reference is commonly owned and the reference is prior art only under 35 U.S.C. § 102(e), § 102(f), and § 102(g), then the cited reference is disqualified as prior art against the present Application for purposes of 35 U.S.C. § 103(a). Here, both Boyd and the present Application are commonly owned by GE Medical Systems Global Technology Company, LLC which is a wholly owned

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subsidiary of the General Electric Company of Schenectady NY. Therefore, if Boyd qualifies as prior art only under 35 U.S.C. § 102(e), § 102(f), or § 102(g), then Boyd is disqualified as prior art against the present Application.

Boyd was filed on August 14, 2002 and claims priority to a provisional application filed on February 22, 2002. Boyd was published on August 28, 2003 and issued as a patent on March 28, 2006. Applicant respectfully submits that since: (i) the Boyd filing date is less than a year before the October 21, 2002 filing date of the present application; and, (ii) the Boyd application was published after the October 21, 2002 filing date, that Boyd does not qualify as either 35 U.S.C. § 102(a) or 35 U.S.C. § 102(b) prior art. Accordingly, Applicant respectfully submits that Boyd is 35 U.S.C. § 102(e) prior art and that by applying 35 U.S.C. § 103(c), Boyd is disqualified as a prior art reference against the present Application.

Applicant further submits that Lutz is deficient in curing the deficiencies of Kaufman. Applicant respectfully submits that Lutz does not disclose, teach or suggest the calculation of the duration of the representative cardiac cycle by averaging using the claimed mean or median methods. Absent this teaching by Lutz, Applicant respectfully submits that the prima facie case of obviousness has not been met. Accordingly, Applicant respectfully requests reconsideration and withdrawal of this objection.

In addition to the foregoing, Applicant finds no motivation or teaching in any of the References to modify a primary Reference in view of its respective secondary Reference to arrive at the claimed arrangement of elements without disturbing the pressure, velocity and flow characteristics and intended purpose of the art being modified.

In light of the foregoing, Applicant respectfully submits that the Examiner's rejections under 35 U.S.C. § 103(a), have been traversed, and respectfully requests that the Examiner reconsider and withdraw these rejections.

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If a communication with Applicant's Attorneys would assist in advancing this case to allowance, the Examiner is cordially invited to contact the undersigned so that any such issues may be promptly resolved.

The Commissioner is hereby authorized to charge any additional fees that may be required for this amendment, or credit any overpayment, to Deposit Account No. 07-0845. In the event that an extension of time is required, or may be required in addition to that requested in a petition for extension of time, the Commissioner is requested to grant a petition for that extension of time that is required to make this response timely and is hereby authorized to charge any fee for such an extension of time or credit any overpayment for an extension of time to the above-identified Deposit Account.

Respectfully submitted,

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